

**To:** Gartner, Lois[Gartner.Lois@epa.gov]; Fitz-James, Schatzi[Fitz-James.Schatzi@epa.gov]  
**From:** Woolford, James  
**Sent:** Fri 8/14/2015 4:55:09 PM  
**Subject:** FW: Urgent Region 8 Request for Clarification on Cessation Directive  
Penn Mine Time Critical Removal request for approval to continue work.docx

Jim Woolford, Director  
Office of Superfund Remediation & Technology Innovation  
US EPA

Sent from my Windows Phone  
Please excuse typos

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**From:** Stavnes, Sandra  
**Sent:** 8/14/2015 12:43 PM  
**To:** Woolford, James; Murray, Bill; Stalcup, Dana; Cheatham, Reggie  
**Cc:** McGrath, Shaun; Hestmark, Martin; DalSoglio, Julie; Ostrander, David; Williams, Laura; DalSoglio, Julie; Bloom, Judy; Card, Joan; Peronard, Paul  
**Subject:** RE: Urgent Region 8 Request for Clarification on Cessation Directive

Jim/Reggie/Dana

Attached is the write up for Penn Mine outlining the current ongoing work and rationale for continuing. We look forward to getting your approval to continue work at this site. I will be in all day today so please get back to me as soon as you can.

Thanks!

Sandy

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Sandra A. Stavnes

Deputy Assistant Regional Administrator

Office of Ecosystems Protection and Remediation (8EPR)

USEPA Region 8

1595 Wynkoop Street

Denver, CO 80202

email: stavnes.sandra@epa.gov

phone: 303-312-6117

**From:** Stavnes, Sandra

**Sent:** Friday, August 14, 2015 10:00 AM

**To:** Woolford, James; Murray, Bill; Stalcup, Dana; Cheatham, Reggie

**Cc:** McGrath, Shaun; Hestmark, Martin; DalSoglio, Julie; Ostrander, David; Williams, Laura; DalSoglio, Julie; Bloom, Judy; Card, Joan

**Subject:** RE: Urgent Region 8 Request for Clarification on Cessation Directive

Jim/Dana/Reggie

Attached is Region 8's table in response to the Cessation Directive. We have also attached a table for 319 mining work that is ongoing.

Bill Murray asked yesterday whether there is a blanket exclusion for time critical removals. We currently have a time critical removal going on at the Pennsylvania Mine in Keystone Colorado (see table) and I will be sending you a current status shortly to seek your approval for continuing that work. Also Martin asked about getting approval for continuing work at the Red and Bonita Mine near the Gold King. Have you made a decision on the R and B work and do you need more information from us on R and B?

We are continuing work at Bullion Mine based on your approval yesterday. We have stopped work at Standard Mine near Crested Butte CO pending HQs/Regional decision.

Sandy

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Sandra A. Stavnes

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**From:** Woolford, James

**Sent:** Thursday, August 13, 2015 6:26 PM

**To:** Murray, Bill; Stalcup, Dana; Cheatham, Reggie

**Cc:** McGrath, Shaun; Hestmark, Martin; DalSoglio, Julie; Stavnes, Sandra; Ostrander, David; Williams, Laura

**Subject:** Re: Urgent Region 8 Request for Clarification on Cessation Directive

Bill, et. al.

Thanks for inquiring about this site.

I have coordinated with the OSWER IO - Mathy, Barry, and Nitin.

Based on the description in your email, and as you recommend in your email, we approve your continuing your response work at Bullion Mine.

Jim Woolford, Director

Office of Superfund Remediation and Technology Innovation

Office of Solid Waste and Emergency Response

US EPA

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Note - EPA email cannot receive or send emails greater than 25 mbs.

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**From:** Murray, Bill

**Sent:** Thursday, August 13, 2015 7:14 PM

**To:** Woolford, James; Stalcup, Dana; Cheatham, Reggie

**Cc:** McGrath, Shaun; Hestmark, Martin; DalSoglio, Julie; Stavnes, Sandra; Ostrander, David; Williams, Laura

**Subject:** Urgent Region 8 Request for Clarification on Cessation Directive

Subject: Clarification on the Exclusion from the Cessation Directive for Time Critical Removal Actions in general and specifically at Basin Mining NPL Site

**Clarification Request: Based on the draft language in the Woolford/Cheatam memo, we want to know if Time Critical Removal Actions are/will be excluded from the cessation directive. We have a number of Time Critical Removal Actions underway at mining sites and this clarification is urgently needed. We would like a written confirmation that we can continue these removals.**

#### BACKGROUND on Bullion Mine at the Basin Mining NPL Site

Removal activities to be completed for OU6 are:

- Installation of a relief well near the Bullion Mine adit intercept boring to prevent a blowout, and to pump the AMD water for treatment in 2015. Local drilling subcontractors to be determined and procured by ER (FY14).
- Removal of site non-historical cabin structures. Clearing and grading area in designated retention pond location, and construction of retention ponds (FY14).
- Treatment of approximately 2.5 million gallons of trapped mine water, and discharging treated water to Jill Creek (FY15).
- Removal of debris creating blockage in adit and installation of a drainage system to allow the AMD flowing freely from the mine adit onto the existing rock-lined channel (FY15).
- Ongoing road maintenance for site accessibility and safety (FY14, FY15).
- Disposal of contaminated sludge and debris at Luttrell Repository

The OSC has placed a berm along the road to contain and direct any adit flow to the treatment/retention pond. He also will have an excavator on site today just in case. We have pumped the volume of water down in the adit behind the debris plug, those materials may have dried out and shifted position somewhat. **If we now stop pumping and treating, the mine would refill and put pressure back on the destabilized plug, which could result in a blowout.** The safest path forward is to continue to pump and treat and fully dewater the mine. The State is fully supportive of our continued dewatering effort.

The distance from the collapsed portal to the well that we are pumping water out of is about 300 feet. If the adit diameter is 4' (most likely scenario), the volume in the adit below the well is 28,201 gallons. If the diameter is 6', the volume is 63, 451 gallons. To be extremely conservative, if the diameter is 10', the volume is 176,255 gallons. Our treatment pond below

the adit portal holds 350,000 gallons, so even with an ongoing flow rate of AMD from the mine of 10 to 20 gallons/minute, this pond is large enough to contain the mine sludges left in the tunnel between the well and the portal.

It is clear that ongoing pump and treatment of the AMD mine pool in the Bullion adit is the safest path forward as it is relieving pressure on the debris plug, and it would be counter-productive to stop our pumping and treating of mine water now. We believe, based on water elevation measurements in the well standpipe, that we've removed over half the volume of water that was in the adit. The total volume we estimated in the adit was approximately 2.5 million gallons prior to beginning the pumping and treating operation. The OSC is excavating a channel over to the treatment/retention pond today in the unlikely event that the debris plug fails before we complete the pump and treat operations. We have the equipment and materials on site to capture and treat any unexpected breach of the debris plugged adit. I can provide additional pictures and would be happy to go up to the site with you this afternoon if need be.